

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A radio frequency receiver comprising ~~an amplifier, circuit elements a setting of which is controlled by at least one control voltage wherein an amplification factor of the amplifier is~~ controlled by the control voltage,

a control unit for switching off the ~~amplifier circuit elements~~ during power-off periods, and

a storage for storing the control voltage while the ~~amplifier is circuit elements are~~ switched off,

wherein the storage comprises a storage capacitor storing the control voltage.

2. (currently amended) The receiver of claim 1 wherein the storage comprises an electronic switch for disconnecting the capacitor from at least part of the ~~amplifier circuit elements~~ while the ~~amplifier is circuit elements are~~ switched off.

3. (currently amended) The receiver of claim 1 wherein the storage comprises a hold circuit for actively maintaining the voltage over the capacitor while the ~~amplifier is circuit elements are~~ switched off.

4. (canceled)

5. (canceled)

6. (currently amended) The receiver of claim 1 wherein the control unit is adapted to switch off the amplifier circuit elements for a typical time period, wherein, during switch-off, a discharge time of the capacitor is much larger than the typical time period.

7. (original) The receiver of claim 1 wherein the capacitor is part of a low pass filter in a feed-back loop.

8. (original) The receiver of any one of the preceding claims comprising an analogue section for selectively receiving and amplifying a radio signal of a given frequency, wherein the control voltage controls a setting of said analogue section.

9. (original) The receiver of claim 8 comprising a frequency downconverter for downconverting an incoming signal to an intermediate frequency and an oscillator circuit being connected to the downconverter, wherein a frequency of the oscillator circuit is being controlled by the control voltage and wherein the oscillator is being switched on and off by the control unit.

10. (original) The receiver of claim 9 wherein the oscillator circuit comprises a voltage controlled oscillator in a phase locked loop, wherein the frequency of the voltage controlled oscillator is being controlled by the control voltage.

11. (currently amended) The receiver of claim 8 ~~wherein said analogue section comprises an amplifier with a gain controlled by said control voltage,~~ wherein said control voltage is adjusted to hold an average signal strength at a desired value.

12. (original) The receiver of claim 1 wherein the control unit switches the circuit elements on and off according to a temporal structure of a received and transmitted radio signal.

13. (original) A radio frequency receiver comprising
a frequency downconverter for downconverting an incoming signal to an intermediate frequency,
an oscillator circuit being connected to the downconverter, a frequency of said oscillator being controlled by a control voltage,
a control unit for switching off the oscillator during power-off periods,
and
a capacitor for storing the control voltage while the oscillator is switched off.

14. (original) The radio frequency receiver of claim 13 wherein the oscillator is arranged in a phase locked loop.

15. (new) A radio receiver comprising:
at least one phase locked loop with a voltage controlled oscillator to deliver a local oscillator signal having a frequency controlled by a control voltage;
a mixing device to mix a received radio signal with said local oscillator signal and to generate a downconverted signal;
a power save unit to switch off said voltage controlled oscillator during power-off periods; and
a storage capacitor to store said control voltage.

16. (new) The radio receiver of claim 15 further comprising a switch to disconnect said storage capacitor from at least part of said radio receiver during power-off periods.

17. (new) The radio receiver of claim 15 further comprising a hold circuit to actively maintain the voltage over said capacitor during power-off periods.

18. (new) The radio receiver of claim 15 wherein the discharge time of said capacitor during said power-off periods is much longer than a typical power-off period.

19. (new) The radio receiver of claim 15 wherein said capacitor is part of a low-pass filter in a PLL feedback loop.

20. (new) A radio receiver, comprising:
an automatic gain control (AGC) circuit to generate a control voltage;
a variable gain amplifier, wherein an amplification factor of the variable gain amplifier is based on the control voltage;
a power save unit for switching off said AGC circuit during power-off periods, and
a storage capacitor to store said control voltage.

21. (new) The radio receiver of claim 20 further comprising a switch for disconnecting said storage capacitor from at least part of said radio receiver during power-off periods.

22. (new) The radio receiver of claim 20 further comprising a hold circuit for actively maintaining the voltage over said capacitor during power-off periods.

23. (new) The radio receiver of claim 20 wherein the discharge time of said capacitor during said power-off periods is much longer than a typical power-off period.

24. (new) The radio receiver of claim 20 wherein said capacitor is part of a low-pass filter of said AGC circuit.

25. (new) The radio receiver of claim 20 wherein said AGC circuit comprises a buffer having an input coupled to the capacitor and an output coupled to the variable gain amplifier.